THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 92

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAURIZIO GALIMBERTI, ENRICO ALBIZZATI
and ROMANO MAZZOCCHI

Junior Party,[1]

TADASHI ASANUMA, TETSUNOSUKE SHIOMURA, NOBUTAKA UCHIKAWA,
TATEYO SASAKI, OSAMU UCHIDA, TUTOMU IWATANI,
SHIGERU KIMURA and TAKEO INOUE

Senior Party.[2]

Interference No. 103,303

FINAL HEARING: November 18, 1997

[1] Application No. 07/721,049, filed June 26, 1991, now U.S. Patent No. 5,196,496, issued March 23, 1993. Accorded Benefit of Italian Patent Application No. 20778 A/90, filed June 27, 1990.

[2] Application No. 08/182,348, filed January 18, 1994. Accorded Benefit of U.S. Application Nos. 07/568,054, filed August 16, 1990, now abandoned; 07/513,851, filed April 24, 1990, now abandoned; 07/995,908, filed December 22, 1992, now abandoned; and 07/956,457, filed October 2, 1992, now abandoned; and Japanese Patent Application No. 137402/1989, filed June 1, 1989.

RONALD H. SMITH, SOFOCLEOUS and HANLON, Administrative Patent Judges.

SOFOCLEOUS, Administrative Patent Judge.

FINAL DECISION

The subject matter of this interference relates to crystalline copolymers of propylene and 1-butene and a process for preparing the copolymers. The counts of this interference are as follows:

Count 1

Crystalline copolymers of propylene and 1-butene with an essentially syndiotactic structure, containing from 1.3 to 10 mole % of 1-butene units, having a melting point from 110E to 140EC., a fraction soluble in xylene at 25EC. less than 10% by weight, and a composition similar to the mixture of the monomers present in the gas phase during preparation of said polymer, wherein the difference between the amount of comonomer present in the gas phase and the amount of comonomer in said composition is between 13% to 23% less in the composition of said copolymer;

or

a syndiotactic propylene copolymer comprising 76 to 99 mole % of propylene and 1 to 24 mole percent of butene wherein in the ^{13}C-NMR spectrum of said syndiotactic propylene copolymer, said copolymer exhibits a ratio of the intensity of a peak at about 20.2 ppm to the sum of the intensities of the total peaks attributable to methyl groups in propylene units at about 19-22 of 0.5 or more.

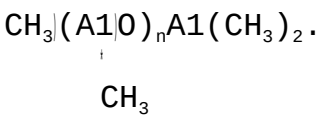
Count 2

A process for the preparation of the copolymers of count 1 comprising the polymerization of gaseous mixtures of propylene

and 1-butene with catalysts obtained from isopropyl (cyclopentadienyl-
1-fluorenyl) hafninum or zirconium dichloride and polymethyl-aluminoxane cyclic or linear compounds of the formula

$$(Al(CH_3)O)_n$$

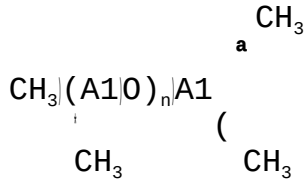
where n is a number from 2 to 25 and



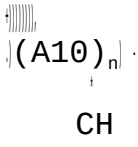
where n is a number from 1 to 25, operating under conditions where the 1-butene molar content present in the gas mixture being continuously fed is from 1.5 to 10%, and the polymerization is conducted in the liquid phase, at a temperature of from -30E to 70EC,

or

the polymerization of propylene and butene with catalysts obtained from isopropyl (cyclopentadienyl-1-fluorenyl) hafnium dichloride or isopropyl (cyclopentadienyl-1-fluorenyl) zirconium dichloride and polymethylaluminoxane cyclic or linear compounds of the formula



or



where n is at least 5, operating under conditions where the ratio of butene to the total constitutional monomer units of the copolymer is from 1 to 24 mole %, and the polymerization is conducted in the liquid phase, at a temperature of from -100EC to 100EC.

The party Galimberti et al.'s claim 1 and the party Asanuma et al.'s claims 9 and 11 correspond to count 1. The party Galimberti et al.'s claim 2 and the party Asanuma et al.'s claims 16 correspond to count 2.

The junior party Galimberti et al. relies under 35 U.S.C. § 119 upon the priority date of its application filed in Italy. Since that date is subsequent to the effective filing date of the senior party Asanuma et al., judgment pursuant to 37 CFR § 1.640(d)(3) would normally be issued against the party Galimberti et al. The party Galimberti et al. filed a motion on the ground that an interference-in-fact does not exist and consideration of the motion was deferred to final hearing. Both parties took testimony,[3] filed briefs, and appeared, through counsel, at final hearing. In addition, the parties filed three motions to suppress evidence and testimony.

Subsequent to the final hearing, the party Galimberti et al. filed a submission (Paper No. 91), which is objected to by

[3] The Galimberti et al. record and exhibits will be referred to, respectively, as GR followed by its page number and GX followed by its number. The Asanuma et al. record and exhibits will be referred to, respectively, as AR followed by its page number and AX followed by its number.

the party Asanuma et al. 37 CFR § 1.654(d) provides that after final hearing no further paper shall be filed except under 37 CFR § 1.658(b) or as authorized by the Administrative Patent Judge (APJ) or the Board. Since the party Galimberti et al.'s submission does not fall within one of the exceptions enumerated by the rule, the submission is not entitled to any consideration.

ISSUES

The following issues are before us:

1. Whether an interference-in-fact does not exist, as urged by the party Galimberti et al.

2. Whether the Galimberti et al. specification does not contain a written description within the meaning of 35 U.S.C. § 112, first paragraph, for its claims 1 and 2, as urged by the party Okamoto et al.

3. Whether the Galimberti et al. motion (Paper No. 72) to suppress should be granted.

4. Whether the Asanuma et al. motion (1) to suppress should be granted.

5. Whether the Asanuma et al. motion (2) to suppress should be granted.

Before considering issues (1) and (2), we must first consider the motions to suppress since they affect the evidence to be considered by us.

The Galimberti et al. motion to suppress seeks to suppress each of the Asanuma six declarations, including the translator's declaration, and the testimony of Dr. Asanuma on the grounds of hearsay and lack of foundation. The motion contends that Dr. Asanuma's testimony concerning the repeats of Asanuma Example 3 shows a lack of personal knowledge concerning the experimental work, because the experimental work was done out by Messrs. Ishii and Sunaga, who were not called to testify. The motion[4] is denied for the reasons set forth in Asanuma et al.'s opposition (Paper No. 74).

We agree with the party Asanuma et al. that Dr. Asanuma's testimony is that of an expert witness and is admissible under Fed. R. Evid. 702. Moreover, the underlying facts presented by Dr. Asanuma are admissible in this interference under the rule of reason, since Dr. Asanuma is the supervisor of Messrs.

[4] The objection raised here would also be applicable to the testimony of Dr. Galimberti who testified about analyses performed by other persons who were not called to testify. See pages 6 and 7 of the opposition.

Ishii and Sunaga. See Holmwood v. Sugavanam, 948 F.2d 1236, 1238-39,
20 USPQ2d 1712, 1714 (Fed. Cir. 1991). In Holmwood, the court stated that it cannot ignore the realities of technical operations in modern day research laboratories, finding that the testimony of a junior technician performing perfunctory tasks under the supervision of a senior scientist is not generally necessary to verify the reliability of evidence about scientific methods or data, where there is an absence of evidence to call into question the trustworthiness of the senior scientist's testimony. Here, we have no evidence to question the trustworthiness of the testimony of Dr. Asanuma, the senior scientist supervisor of Messrs. Ishii and Sunaga.

The Asanuma motions to suppress are denied. The motions urge that certain evidence (testimony and exhibits) relied upon by the party Galimberti et al. are not relevant to the issues to be considered at final hearing. The motions do not point out where that evidence is relied upon by the party Galimberti et al.'s opening brief. In any event, we are of the view that the evidence, in toto, should not be suppressed, but rather should remain in the case and be subject to

evaluation as to what weight the evidence, if it is relied upon by us, should be accorded.

INTERFERENCE-IN-FACT

We hold that an interference-in-fact exists.

The interference having been declared under 35 U.S.C. § 135(a), it is presumed that an interference-in-fact exists and that each party's claims designated as corresponding to a count define the same patentable invention as the count. An "interference-in-fact" exists when at least one claim of a party that is designated to correspond to a count and at least one claim of an opponent that is designated to correspond to the count define the same patentable invention. 37 CFR § 1.601(j).

The party filing a preliminary motion urging that an interference-in-fact does not exist has the burden of proof on the motion. Kubota v. Shiyuba, 999 F.2d 517, 27 USPQ2d 1418 (Fed. Cir. 1993). The party must show that its claims corresponding to the count are directed to a separate patentable invention from each of its opponent's claims designated in the notice as corresponding to the count. Hsing v. Myers, 2 USPQ2d 1861 (Bd. Pat. App. & Int. 1987).

The test for interference-in-fact is set forth in 37 CFR § 1.601(n), which provides that an invention "A" is a separate patentable invention with respect to invention "B" when invention "A" is new (35 U.S.C. § 102) and non-obvious (35 U.S.C. § 103) in view of invention "B," assuming invention "B" is prior art with respect to invention "A." Since the interference contains two counts, we will address the respective claims corresponding to each count.

Interference-in-fact as to Count 1

We now turn to the question of whether an interference-in-fact exists as to count 1, i.e., is Galimberti et al.'s claim 1 new and nonobvious over Asanuma et al.'s claim 9 or 11, assuming that Asanuma et al.'s claims are prior art with respect to Galimberti et al.'s claim 1.

Galimberti et al.'s claim 1 reads as follows:

> 1. Crystalline copolymers of propylene and 1-butene with an essentially syndiotactic structure, containing from 1.3 to 10 mole % of 1-butene units, having a melting point from 110E to 140EC., a fraction soluble in xylene at 25EC. less than 10% by weight, and a composition similar to the mixture of the monomers present in the gas phase during preparation of said polymer, wherein the difference between the amount of comonomer present in the gas phase and the amount of comonomer in said composition is between 13% to 23% less in the composition of said copolymer.

Asanuma et al.'s claims 9 and 11 depend from claim 8. These claims read as follows:

8. A syndiotactic propylene copolymer comprising 70 to 99 mole % of propylene and 1 to 30 mole % of an olefin other than propylene wherein in the ^{13}C-NMR spectrum of said syndiotactic propylene copolymer, said copolymer exhibits a ratio of the intensity of a peak at about 20.2 ppm to the sum of the intensities of the total peaks attributable to methyl groups in propylene units at about 19-22 ppm of 0.3 or more.

9. A syndiotactic propylene copolymer according to Claim 8, wherein said olefin other than propylene is an "-olefin having 2 or 4 to 25 carbon atoms.

11. A syndiotactic propylene copolymer according to Claim 9, comprising 76 to 99 mole% of propylene and 1 to 24 mole% of butene wherein in the ^{13}C-NMR spectrum of said syndiotactic propylene copolymer, said copolymer exhibits a ratio of the intensity of a peak at about 20.2 ppm to the sum of the intensities of the total peaks attributable to methyl groups in propylene units at about 19-22 of 0.5 or more.

Galimberti et al.'s claim 1 is directed to crystalline syndiotactic copolymers of propylene and 1-butene containing 1.3 to 10 mole % of 1-butene units. Asanuma et al.'s claim 11 is directed to a syndiotactic copolymer comprising 76 to 99 mole % of propylene and 1 to 24 mole % of butene. The following table compares the syndiotactic propylene butene copolymers of the parties.

Galimberti's Claim 1	Asanuma et al.'s claim 11

Crystalline[5] copolymers of propylene and 1-butene with an essentially syndiotactic structure	A syndiotactic propylene copolymer comprising propylene and butene
1.3 to 10 mole% of 1-butene	1 to 24 mole % of butene
melting point from 110E to 140EC	--------
a fraction soluble in xylene less than 10% by weight	--------
composition similar to the mixture of the monomers present in the gas phase during the preparation of said monomers	----------
-------	wherein in the ^{13}C-NMR spectrum of said syndiotactic propylene copolymer, said copolymer exhibits a ratio of the intensity of a peak at about 20.2 ppm to the sum of the intensities of the total peaks attributable to methyl groups in propylene units at about 19-22 of 0.5 or more.

Assuming that the copolymer of Asanuma et al.'s claim 11 is prior art to Galimberti et al.'s claim 1, we agree with the APJ in charge of this interference that the party Galimberti

[5] According to paragraph 6 of the declaration of Dr. Maurizio Galimberti (GX 1), "the measure of xylene solubles is a rough evaluation of the cristallinity [SIC] of the polymer [propylene/1-butene]. The lower is the xylene soluble fraction, the higher is the cristalline [SIC] degree of the polymer."

et al.'s copolymer would have been anticipated or rendered obvious by the copolymer of Asanuma et al. Both copolymers contain identical components (monomers) in overlapping ranges. It is settled that where the prior art describes a composition which reasonably appears to be identical or substantially the same as the claimed composition, the subject matter claimed is prima facie unpatentable under 35 U.S.C. §§ 102 and/or 103. In re Best,
562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977); In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)(The patentability of a product does not depend upon its method of manufacture and if the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process). In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)("The discovery of a new property or use of a previously known composition, even when that property and use are unobvious from the prior art, cannot impart patentability to claims to the known composition.")

The burden is upon the party Galimberti et al. to demonstrate that the copolymers of its claim 1 are not only

different but patentably distinct from the copolymers embraced by the party Asanuma et al.'s claims 9 and 11.

In its brief, the party Galimberti et al. argues that example 3 of Asanuma et al.'s application does not contain sufficient detail concerning the production of a copolymer within the scope of Asanuma et al.'s claim 11. The fact that example 3 may not contain sufficient detail to satisfy the party Galimberti et al. is not considered relevant to the issue of interference-in-fact, since the Asanuma et al. application disclosure is presumed to comply with the provisions of 35 U.S.C. § 112, first paragraph, with respect to enablement and written description, especially where the party Galimberti et al. filed no preliminary motion for judgment attacking the sufficiency of the application disclosure. Moreover, it is well settled that a patent does not have to be as detailed as a set of production specifications in order to meet the enablement requirements of 35 U.S.C. § 112. Trio Process Corp. v. L. Goldstein's Sons, Inc., 461 F.2d 66, 74, 174 USPQ 129, 134 (3d Cir.) cert. denied, 409 U.S. 997,
175 USPQ 577 (1972). Likewise, the arguments raised by the party Galimberti et al. concerning the inherency of example 3

and lack of other examples in the Asanuma et al. application showing copolymers having butene units less than 11.8 mole % are not relevant to the consideration of the question of no interference-in-fact. As we noted above, the test for no interference-in-fact is a showing that the party Galimberti et al.'s claim 1 is patentably distinct from the party Asanuma et al.'s claims 9
and 11.

The party Galimberti et al. has not alleged any criticality in the range of 1.3 to 10 mole % for its 1-butene monomer vis-à-vis the range of 1 to 24 mole % recited in the party Asanuma et al.'s claim 11 for its butene monomer. Nor has the party Galimberti et al. alleged any criticality in its copolymer having a fraction soluble in xylene less than 10% by weight. Rather, the party Galimberti et al. argues three differences between its claim 1 and claims 9 and 11 of the party Asanuma et al. These differences are (1) the Galimberti et al.'s copolymers are homogenous whereas the Asanuma copolymers are not, (2) the Galimberti et al. copolymers have a fraction soluble in xylene less than 10% by weight whereas the Asanuma copolymers do not, and (3) the Galimberti et al. copolymers are made by a different process than the Asanuma

copolymers. These are the only arguments by the party Galimberti et al. to predicate the separate patentability of its claims. These arguments are addressed seriatim below.

I

With respect to the homogeneous argument, we note that homogeneous is not a limitation recited in the party Galimberti et al.'s claim 1. It is settled that a claim is to be given its broadest reasonable interpretation and that a limitation from specification is not to be read into the claim. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993); Intervet America, Inc. v. Kee-Vet Lab. Inc., 887 F.2d 1050, 1053, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989). The reason for the rule is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The foregoing rule of claim construction applies to patent claims which correspond to the count. Lamont v. Berguer, 7 USPQ2d 1580, 1582 (Bd. Pat. App. & Int. 1988). Since Galimberti et al.'s claim 1 does not recite that the copolymer is homogeneous, we will not read the limitation into the claim.

We note that the Galimberti et al. specification, column 1, lines 64 to 68, states that by operating the process for preparing the copolymers, one obtains copolymers with a homogeneous comonomer distribution. However, the degree of homogeneity is not defined in the specification, nor has the party Galimberti et al. referred us to any portion of its record to show the degree of homogeneity of its copolymers. Even if we were to read homogeneous into claim 1, as requested by the party Galimberti et al, we would necessarily read the claim as if the copolymer were 100% homogeneous. This, clearly, is not the case since the copolymer, which is syndiotactic, may have a rrrr pentad content greater than 85%. See column 1, line 68 to column 2, line 2. Thus even if we were to read the homogeneous limitation into the claim, which we cannot, the copolymer would not appear to be entirely homogeneous, because of the definition of syndiotactic in the patent specification. Nowhere is the degree of syndiotacticity correlated with any degree of homogeneousness.

II

With respect to the Galimberti et al. copolymers having a fraction soluble in xylene less than 10% by weight, we are not persuaded that the Asanuma et al. copolymers do not

possess the requisite solubility. In support of its position that the Asanuma et al. copolymers do not possess the requisite solubility, the party Galimberti et al. allegedly replicated example 3 of Asanuma et al.'s application and found that the copolymer produced therein, albeit having a composition within the scope of Galimberti's claim, possessed a xylene solubility
of 59%.

We agree with the party Asanuma et al. that the party Galimberti et al did not fairly replicate the example within the teachings of the application.

Example 3 reads, in part, as follows:

> In a 2-liter autoclave, the same amount of the same catalyst as in Example 1 was dissolved in 1 liter of toluene, and propylene was placed therein at 30EC until a level of 5 kg/cm^{2}G had been reached. After-ward, 45 g of butene-1 was injected thereinto at the same temperature, and polymerization reaction was carried out at 30EC for 2 hours, while propylene was added thereto so that the polymerization pressure might always be 5 kg/cm^{2}G. After the unpolymerized monomers had been purged, the autoclave was opened, and the contents thereof were filtered, washed with toluene (1 liter, 5 times) and dried in the same manner as in Example 1, thereby obtaining 64.3 g of a powdery copolymer.

The example states that the catalyst was dissolved in 1 liter of toluene, and propylene was placed therein and "[a]fterward, 45 g of butene-1 was <u>injected</u> thereto. . . ."

(Emphasis added). We agree with the party Asanuma et al. that injecting means adding the butene as quickly as possible to the reaction mixture. The party Galimberti et al. did not add butene-1 as quickly as possible but rather added the butene-1 over a period of 20 minutes. We are persuaded that the party Asanuma et al.'s interpretation of injecting is a reasonable one, especially since Dr. Galimberti testified at GR 35 and 36 that in the examples of his patent methanol was injected into the reaction mixture to stop the reaction and that the term injected in the context of his patent means to inject methanol as a liquid in the shortest possible time.

Moreover, we note that party Asanuma et al.'s claim 11 positively recites a particular range for its ^{13}C-NMR spectrum. The Asanuma et al. application teaches at page 7, lines 17 to 20 and 29, that if the produced copolymer does not meet the requirements for ^{13}C-NMR spectrum, the copolymer must be washed with a solvent, such as xylene. The evidence of the party Galimberti et al. does not address this limitation, i.e., show that any copolymer which does not meet the requirements of ^{13}C-NMR spectrum but which meets those requirements after washing, would not have a xylene solubility less than 10%.

III

We do not agree with the party Galimberti et al. that its claimed copolymers are made by a different process than the party Asanuma et al.'s polymers for the reasons set forth in our discussion with respect to count 2, infra.

For the foregoing reasons, we hold that the party Galimberti et al. has not sustained its burden of proof with respect to count 1.

Interference-in-fact as to Count 2

We now turn to the question of whether an interference-in-fact exists as to count 2, i.e., is Galimberti et al.'s claim 2 new and nonobvious over Asanuma et al.'s claim 16, assuming that Asanuma et al.'s claim 16 is prior art with respect to Galimberti et al.'s claim 2.

Galimberti et al.'s claim 2 reads as follows:

2. A process for the preparation of the copolymers of claim 1 comprising the polymerization of gaseous mixtures of propylene and 1-butene with catalysts obtained from isopropyl (cyclopentadienyl-1-fluorenyl) hafninum or zirconium dichloride and polymethylaluminoxane cyclic or linear compounds of the formula

$$(Al\text{-}O)_n$$
$$|$$
$$CH_3$$

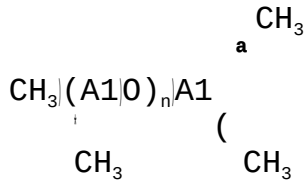
where n is a number from 2 to 25 and

$$CH_3(Al(O)_nAl(CH_3)_2$$
$$|$$
$$CH_3$$

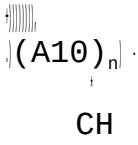
wherein n is a number from 1 to 25, operating under conditions where the 1-butene molar content present in the gas mixture being continuously fed is from 1.5 to 10%, and the polymerization is conducted in the liquid phase, at a temperature of from -30E to 70EC.

Asanuma et al.'s claim 16 reads as follows:

16. A process for the preparation of the copolymers of claim 11 comprising the polymerization of propylene and butene with catalysts obtained from isopropyl (cyclopentadienyl-1-fluorenyl) hafnium dichloride or isopropyl (cyclopentadienyl-1-fluorenyl) zirconium dichloride and polymethylaluminoxane cyclic or linear compounds of the formula



or



where n is at least 5, operating under conditions where the ratio of butene to the total constitutional monomer units of the copolymer is from 1 to 24 mole %, and the polymerization is conducted in the liquid phase, at a temperature of from -100EC to 100EC.

Galimberti et al.'s claim 2 is directed to a process for the preparation of copolymers of propylene and 1-butene comprising the polymerization of gaseous mixtures of propylene and 1-butene with a hafnium or zirconium dichloride catalyst wherein the 1-butene molar content in the gas mixture being continuously fed is from 1.5 to 10% and the polymerization is conducted in the liquid phase at a temperature of from -30E to 70EC.

Asanuma et al.'s claim 16 is directed to a process for the preparation of copolymers of propylene and butene comprising the polymerization of propylene and 1-butene with the same hafnium or zirconium dichloride catalyst as claimed by Galimberti et al. wherein the ratio of butene to the total constitutional monomer units of the copolymer is 1 to 24 mole % and the polymerization is conducted in the liquid phase at a temperature of from -100E to 100EC.

On page 15 of its main brief, the party Galimberti et al. states:

> As regards Count 2, one skilled in the art reading Asanuma claim 16 would look to Example 3 for guidance in preparing propylene/1-butene copolymers having a low mole percent butene. But Example 3 is not "specific." It omits many necessary details that one skilled [in the] art would need to know in order to truly and reproducibly repeat it. Because of these omissions, one skilled in the art would have to make a number of reasonable assumptions in order to even try to "repeat" the example. Dr. Galimberti made reasonable assumptions, and the copolymer he obtained showed a xylene solubility of 59%. (Galimberti patent claim 1 requires a xylene solubility of less than 10%.)

On pages 31 and 32 of its main brief, the party Galimberti

et al. states:

> As previously demonstrated, the Asanuma application does not establish that it "possessed" the Galimberti copolymers. The same is true as regards the Galimberti process as set out in Galimberti patent claim 2. Asanuma has admitted the processes are different. [Citation omitted.] Interestingly, Asanuma made no attempt to oppose Galimberti's EPO counterpart patent (GR 147.)
>
> The Asanuma application process does not provide a continuous feed of a gaseous mixture of reactants, as called for in Galimberti claim 2. [Citation omitted.] The Asanuma process does not maintain the composition of a gaseous mixture of reactants at a constant ratio, as called for in Galimberti claim 2. [Citation omitted.] There is no possibility that a constant ratio could be achieved by Asanuma because its examples disclose the feeding of comonomer only at the state of the reaction. [Citation omitted.]
>
> The process allegedly adopted in the Asanuma repeats of application Example 3 is intricate, complex, and most significantly, is in no way

disclosed or suggested by Example 3 as written. Unless a person skilled in the art set out with a preconceived agenda--to seize upon whatever procedure was necessary to obtain a copolymer falling within the Galimberti patent claims--that person would never repeat Asanuma application Example 3 in the particular manner and technique that Dr. Asanuma testified was adopted. There is nothing in the example that describes that

particular manner and technique. The Asanuma process as set out in Example 3 is not specific and hence is unrepeatable and unreproducible--too many essential details are missing. The specific process actually adopted by Asanuma for the "repeats" of Example 3 is utterly unsupported by the text of that Example. Thus, the Asanuma application altogether fails to disclose or suggest the Galimberti process as set out in Galimberti patent claim 2.

The following table compares the processes of the parties.

Galimberti et al.'s Claim 2	Asanuma et al.'s claim 16
A process for the preparation of the copolymers of claim 1 comprising	A process for the preparation of the copolymers of claim 1 comprising
polymerization of gaseous mixture of propylene and 1-butene	polymerization of propylene and butene
with catalysts obtained from isopropyl (cyclopentadienyl-1 fluorenyl) hafnium or zirconium dichloride	with catalysts obtained from isopropyl (cyclopentadienyl-1 fluorenyl) hafnium or zirconium dichloride
where the 1-butene molar content in the gas mixture being continuously fed is from 1.5 to 10%	---
the polymerization is conducted in the liquid phase	the polymerization is conducted in the liquid phase
at a temperature from -30E to 70EC.	at a temperature from -100E to 100EC.

It is evident from the table that both processes produce copolymers having identical components (monomers) in over-lapping ranges; both use the same catalyst; both conduct the

polymerization in the liquid phase; and both conduct the polymerization in overlapping temperature ranges.

Asanuma et al.'s claim 16 differs in two respects from Galimberti et al.'s claim 2. Claim 16 does not recite whether the reactants are either gaseous or liquid. Consequently, claim 16 embraces both gaseous and liquid reactants. Claim 16 does not recite continuously feeding the reactants, but rather recites polymerizing the reactants. Consequently, claim 16 embraces both batch and continuous processes.

The burden is upon the party Galimberti et al. to show that the process of its claim 2 is patentably distinct from that of Asanuma et al.'s claim 16. In our view, the party Galimberti et al. has not sustained its burden, because the party Galimberti et al. has not shown that the differences would render its claim 2 patentably distinct from Asanuma et al.'s claim 16.

To the extent that the party Galimberti urges that its process maintains the gaseous mixture at a constant ratio, the argument fails because constant ratio is not a limitation recited in claim 2. Claim 2 merely recites a range for the 1-butene content in the gas mixture. In no way would this range constitute a constant ratio.

To the extent that the party Galimberti et al. argues the lack of detail in Example 3 of Asanuma et al.'s specification, the argument is not considered relevant, since the Asanuma et al. application disclosure is presumed to comply with the provisions of 35 U.S.C. § 112, first paragraph, with respect to enablement and written description, especially where the party Galimberti et al. filed no preliminary motion attacking the sufficiency of the disclosure. As we noted above, it is settled that a patent does not have to be as detailed as a set of production specifications to meet the enablement requirements of 35 U.S.C. § 112. Trio Process Corp. v. L. Goldstein's Sons, Inc., 461 F.2d at 74, 174 USPQ at 134.

For the foregoing reasons, we hold that the party Galimberti et al. has not sustained its burden to show that an interference-in-fact does not exist.

WRITTEN DESCRIPTION

Since we have held that an interference-in-fact exists, it is not necessary for us to determine whether the party Galimberti et al.'s specification contains a written description for the limitation "the difference between the amount of comonomer present in the gas phase and the amount of comonomer in said composition is between 13% to 23% less in

the composition of said copolymer" which is recited in claims 1 and 2. Since these claims are not patentable to the party Galimberti et al. since it lost the priority contest, the question of the patentability of these claims under 35 U.S.C. § 112, first paragraph, is moot. However, for the sake of completeness, we will review the matter.

The range between 13% to 23%, recited in claim 1, and dependent claim 2, is not described haec verba in the Galimberti et al. specification. It is not disputed by the party Asanuma et al. that the party Galimberti et al.'s repeats of its examples 1 and 2, respectively, showed two points, 13.33% and 23.33%. The party Galimberti et al. rounded these two points to 13% and 23% and added the limitation in question as a range "between 13 to 23%" to its claim 1.

We agree with the party Asanuma et al. that the Galimberti et al. patent specification does not contain a written description for the range "between 13 to 23%." The recited range does not include the endpoints, 13% and 23%, because the term "between" means that the values must be intermediate to the endpoints.

For the foregoing reasons, we hold that the party Galimberti et al.'s specification does not contain a written description for its claims 1 and 2.

JUDGMENT

Judgment with respect to the subject matter of the count in issue is hereby awarded to Tadashi Asanuma, Tetsunosuke Shiomura, Nobutaka Uchikawa, Tateyo Sasaki, Osamu Uchida, Tutomu Iwatani,
Shigeru Kimura and Takeo Inoue, the senior party.

Accordingly, on the present record, Galimberti et al. are not entitled to a patent containing claims 1 and 2, and Asanuma et al. are entitled to a patent containing claims 9, 11 and 16.

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RONALD H. SMITH)
Administrative Patent Judge)
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